



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,221	09/15/2003	Vivek G. Gupta	42P17782	2123
8791 7590 10/29/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER MERED, HABTE	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 10/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/663,221

Applicant(s)

GUPTA ET AL.

Examiner

Habte Mered

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/01/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 8/1/07 has been entered and fully considered.
2. Applicant has cancelled claims 1-28 and amended all remaining independent claims.
3. Claims 29-60 are pending. Claims 29, 43 and 57 are the base independent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claim 29** is rejected under 35 U.S.C. 102(e) as being anticipated by Holmstrom et al (US 6, 907, 265 B1), hereinafter referred to as Holmstrom.

Holmstrom teaches a system and method for providing GPRS connection to a portable computer.

2. Regarding **claim 29**, Holmstrom teaches a computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions when executed by a computer (**Figure 1, element 102; Figure 2, element 200; Figure 3, element 300**), cause the computer (**Figure 3, element 300**) to perform: sharing a GPRS communications module between a primary processor system that operates as a host

system (See Figure 1, element 104, Figure 3, element 350 – Please note that as illustrated in Column 3:42-55 that the mobile termination unit has to have a GPRS communication module to attach to the GPRS network. Simply put any mechanism that facilitates direct communication with the GPRS network qualifies as a GPRS communication module. Further since the mobile terminal 104 hosts the GPRS communication module it qualifies to be the host system. Also since the mobile terminal 104 has to have a processor the processor in the mobile is designated as the primary processor) and a secondary processor system (Figure 3, element 305) that can share control of the GPRS communications module (The mobile terminal 104 of Figure 1 or 3340 of Figure 3 has to attach to the GPRS Network and therefore has to have some form of a GPRS communication module) with the primary processor system to allow the secondary processor system to utilize the GPRS communications module. (Basically Holmstrom's Figure 3 is identical to Applicant's Figure 2 wherein the Applicant's Host GPRS device maps to Holmstrom mobile terminal 340 in Figure 3 and such a mobile terminal has a processor making it the primary processor and the mobile terminal talks to the GPS network and is GPRS enabled and has to have a GPRS communication module. Further Applicant's Notebook Computer maps to Holmstrom's Figure 3 element 300 with element 305 being the secondary processor. Holmstrom's Figure 3, element 330, i.e. modem maps to the sharing module as it facilitates use of the mobile terminal 340 GPRS communication module.)

2. **Claims 29-57** are rejected under 35 U.S.C. 102(e) as being anticipated by Kardach et al (US 7, 080, 271 B1), hereinafter referred to as Kardach.

Kardach teaches a computing system that has a main CPU for high power state and non-main CPU for a low power state where the two processors share I/O interfaces.

3. Regarding **claim 29**, Kardach teaches a computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions when executed by a computer, cause the computer to perform: sharing a GPRS communications module (**Figure 9A, element 913 – see Column 14:62-67 and Column 15:1-14 and Column 15: 20-21**) between a primary processor system (**Figure 9A, Main CPU 901**) that operates as a host system and a secondary processor system (**Figure 9A, Non Main CPU 917**) that can share control of the GPRS communications module with the primary_ processor system to allow the secondary_ processor system to utilize the GPRS communications module. (**As illustrated in Figure 9A and Columns 4:9-13, 6:17-37, 14:62-67, and 15:1-14 that the Main CPU 901 shares the GPRS Modem 913 with the Non Main CPU 917. Note that the sharing is done on the basis of which processor is active and in Figure 9A the Non Main CPU is active and all shaded elements are inactive.**)

4. Regarding **claim 43**, Kardach discloses an apparatus, comprising:
a GPRS sharing module (**See Figure 7 and illustration on Column 11:22-40 and basically Kardach teaches the sharing module of Figure 7 determines which processor is up and using the peripheral entities like the GPRS WWAN modem shown in Figure 9A as element 913**); a GPRS communications module (**Figure 9A,**

Art Unit: 2616

element 913 – see Column 14:62-67 and Column 15:1-14 and Column 15: 20-21)

connected to the GPRS sharing module (**Figure 7**); a primary processor system (**Figure 9A, Main CPU 901**) connected to the GPRS sharing module (**Figure 7**); and a secondary processor system (**Figure 9A, Non Main CPU 917**) connected to the GPRS sharing module, wherein the GPRS sharing module (**Figure 7**) is configured to allow the primary processor system and secondary processor system to share control of a host controller (See **Figure 7 and illustration on Column 11:22-40**) of the GPRS communications module to allow the secondary processor system to utilize the GPRS communications module. (As illustrated in **Figure 9A and Columns 4:9-13, 6:17-37, 14:62-67, and 15:1-14 that the Main CPU 901 shares the GPRS Modem 913 with the Non Main CPU 917. Note that the sharing is done on the basis of which processor is active and the circuit in Figure 7 is the sharing module that determines which processor is active and in control of the GPRS modem 913 in Figure 9A. Also in Figure 9A the Non Main CPU is active and all shaded elements are inactive.)**

5. Regarding **claim 57**, Kardach discloses an apparatus (See **Figure 9A**), comprising: a first hardware interface coupled with a primary processor system (**Figure 9A, Main CPU 901 and the interface is element 903 as illustrated in Column 15:25-42**); a sharing module coupled to the universal serial bus hardware interface (See **Figure 7 and illustration on Column 11:22-40**), wherein the sharing module allows a GPRS communications module (**Figure 9A, element 913 –**

see Column 14:62-67 and Column 15:1-14 and Column 15: 20-21) to be shared between the primary processor system and a secondary processor system; and a second hardware interface (Figure 9A, elements 923/907 and 925 as illustrated in Column 15:32-42) coupled to the sharing module coupled with the secondary processor system. (As illustrated in Figure 9A and Columns 4:9-13, 6:17-37, 14:62-67, and 15:1-14 that the Main CPU 901 shares the GPRS Modem 913 with the Non Main CPU 917. Note that the sharing is done on the basis of which processor is active and the circuit in Figure 7 is the sharing module that determines which processor is active and in control of the GPRS modem 913 in Figure 9A. Also in Figure 9A the Non Main CPU is active and all shaded elements are inactive.)

6. Regarding **claims 30 and 44**, Kardach discloses the computer-readable medium having stored thereon additional instructions, the additional instructions when executed by a computer, cause the computer to further perform: routing GPRS communications between the primary processor system and the GPRS communications module via a sharing module **(See Figure 7 and illustration on Column 11:22-40)**; and routing GPRS communications between the secondary processor system and the GPRS communications module via the sharing module. **(As illustrated in Figure 9A and Columns 4:9-13, 6:17-37, 14:62-67, and 15:1-14 that the Main CPU 901 shares the GPRS Modem 913 with the Non Main CPU 917. Note that the sharing is done on the basis of which processor is active and the circuit in Figure 7 is the sharing module that determines which processor is active and in control of the GPRS modem 913 in Figure 9A. Also in Figure 9A the Non Main CPU is active and all**

Art Unit: 2616

shaded elements are inactive. Routing used by the Applicant boils down to determining by the sharing module which processor uses the GPRS modem and Kadrach effectively teaches the same concept.)

7. Regarding **claims 31 and 45**, Kardach discloses the computer-readable medium, having stored thereon additional instructions, the additional instructions when executed by a computer, cause the computer to further perform: presenting the GPRS communications module as a slave device; and presenting the primary processor system and secondary processor system as master devices to the GPRS communications module. **(This simply a consequence of the main and non main cpus in Figure 9A shown as elements 901 and 917 have controller capability making them master and peripheral devices like the GPRS Communication module shown as element 913 in Figure 9A are always controlled by the processors and are therefore slave devices.)**

8. Regarding **claims 32 and 46**, Kardach discloses a computer-readable medium, having stored thereon additional instructions, the additional instructions when executed by a computer, cause the computer to further perform selecting whether to service either GPRS communications of the primary processor system or the secondary processor system. **(This is a direct consequence of which processor is selected by the sharing module and consequently the GPRS modem is used by the appropriate processor. See Figure 7 and illustration on Column 11:22-40)**

9. Regarding **claims 33 and 47**, Kardach discloses a computer-readable medium and apparatus, having stored thereon additional instructions, the additional instructions

Art Unit: 2616

when executed by a computer, cause the computer to further perform translating GPRS data packets between a first transport mode and a second transport mode. **(See Column 15:15-30)**

10. Regarding **claims 34 and 48**, Kardach discloses a computer-readable medium and apparatus, wherein the first transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI; and wherein the second transport mode includes a universal serial bus (USB), an RS-232 connection, Firewire, and mPCI. **(See Column 15:15-30)**

11. Regarding **claims 35 and 49**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module, the primary processor system and the secondary processor system are included in a notebook computer. **(See Figure 9B)**

12. Regarding **claims 36 and 50**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module is integrated into the secondary processor system; and wherein the secondary processor system is a low-power computer system and the primary processor system is a main CPU/OS computer system. **(See Column 16:6-23 and Figure 10 and See Figure 7 and illustration on Column 11:22-40)**

13. Regarding **claims 37 and 51**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module is integrated into the secondary processor system **(Kardach's sharing module shown in Figure 7 can be part of the Non-Main CPU as illustrated in Column 16:6-23)**, and the secondary processor system is a multi-function GPRS enabled device; and wherein the primary processor system includes a notebook, a tablet, a laptop, and a desktop computer system. **(Effectively**

each unit is equivalent to one another such as a notebook to a laptop and is shown in Figure 9B. See also Columns 13:1-10, 13:35-50, and 14:1-10 and Figures 7, 8A, and 8B)

14. Regarding **claims 38 and 52**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module is integrated with a secondary controller of the secondary processor system. **(Kardach's sharing module shown in Figure 7 can be part of the Non-Main CPU as illustrated in Column 16:6-23)**

15. Regarding **claims 39 and 53**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module is included in the primary processor system. **(Kardach's sharing module shown in Figure 7 can be part of the Non-Main CPU as illustrated in Column 11:22-40)**

16. Regarding **claims 40 and 54**, Kardach discloses a computer-readable medium and apparatus, wherein the GPRS module communicates with one or more secondary GPRS devices via a GPRS network. **(See Figure 9A and Column 15:15-30)**

17. Regarding **claims 41 and 55**, Kardach discloses a computer-readable medium and apparatus, wherein the sharing module communicates with a USB host controller and a GPRS module. **(See Figures 7 and 9A and Columns 11:22-40 and 15:15-30)**

18. Regarding **claims 42 and 56**, Kardach discloses a computer-readable medium, having stored thereon additional instructions, the additional instructions when executed by a computer, cause the computer to further perform switching control between the primary processor system and secondary processor system, upon the occurrence of an event, wherein the event includes opening of a computer lid, receiving a data message

Art Unit: 2616

by the first processor system, receiving a data message by the second processor system, closing a computer lid, and receiving a switch command. **(See Columns 13:1-10, 13:35-50, and 14:1-10 and Figures 7, 8A, and 8B)**

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 58-60** rejected under 35 U.S.C. 103(a) as being unpatentable over Kardach in view of Moreton et al (US Pub. No. 20040203296), hereinafter referred to as Moreton.

3. Regarding **claim 58**, Kardach fails to expressly disclose an apparatus, wherein the sharing module includes: a GPRS NDIS driver to receive and send data packets with the second hardware interface; and a USB function driver to receive and send the data packets with the first hardware interface. Kardach discloses a sharing module (See Figure 7) with the appropriate network interface driver to communicate with the second hardware interface (i.e. interfaces with 2nd processor) and a USB function driver to receive and send the data packets with the first hardware interface (i.e. interfacing with 1st processor).

Moreton teaches a method and system for attaching a USB network adapter supporting RNDIS and non-RNDIS operating systems.

Moreton discloses an apparatus, wherein the sharing module includes: a GPRS NDIS driver to receive and send data packets with the second hardware interface; and a USB function driver to receive and send the data packets with the first hardware interface. **(See Paragraphs 13 and 14 and Figure 3)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kardach's apparatus to incorporate NDIS driver to receive and send data packets with the second hardware interface; and a USB function driver to receive and send the data packets with the first hardware interface. The motivation for using NDIS (Network Driver Interface) is to minimize vendor supplied interfaces in order to reduce vendor development time to reduce cost and increase user satisfaction by providing uniformity as illustrated in Moreton's paragraph 4.

4. Regarding **claim 59**, the combination of Kardach and Moreton in the rejection of claim 58 also discloses an apparatus wherein the USB function driver includes a protocol translator to translate between RNDIS and NDIS. **(See Moreton Paragraphs 4 and 10)**

5. Regarding **claim 60**, Kardach discloses an apparatus wherein the sharing module is a GPRS sharing module. **(Figure 9A, element 913 – see Column 14:62-67 and Column 15:1-14 and Column 15: 20-21 and See Figure 7 and illustration on Column 11:22-40)**

Response to Arguments

Applicant's arguments with respect to all amended independent claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on 571 272 7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10-22-07
HM



DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600